

WHAT IS CLAIMED IS:

1. A method for protecting a vehicle system from a load dump, comprising:

5 sensing an input voltage pulse exceeding a first value;

determining whether the voltage pulse is a load dump;

disconnecting the system from power if the voltage pulse is a load dump; and

10 absorbing the voltage pulse if the voltage pulse is not a load dump.

2. The method of Claim 1, further comprising reconnecting the system with power when the voltage pulse  
15 concludes.

3. The method of Claim 1, wherein determining whether the voltage pulse is a load dump comprises measuring a time duration of the voltage pulse.  
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4. The method of Claim 3, wherein disconnecting the system from power if the voltage pulse is a load dump comprises disconnecting the system from power if the time duration of the pulse exceeds a second value.  
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5. The method of Claim 4, wherein the second value comprises approximately seventeen milliseconds.

6. The method of Claim 1, wherein disconnecting the system from power if the voltage pulse is a load dump  
30 comprises disconnecting a display unit of an auxiliary

vision system from power if the voltage pulse is a load dump.

7. The method of Claim 6, wherein the display unit  
5 is coupled to an auxiliary vision system of a vehicle.

8. The method of Claim 6, wherein the display unit  
is coupled to a global positioning satellite (GPS) system  
of a vehicle.

9. A method for displaying an image at a display unit, comprising:

receiving an image from a video source coupled to the display unit;

5 projecting the image onto a fold mirror of the display unit;

reflecting the image onto an imaging mirror of the display unit for viewing by a user;

sensing an input voltage pulse exceeding a first  
10 value;

determining whether the voltage pulse is a load dump; and

disconnecting the display unit from power if the voltage pulse is a load dump.

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10. The method of Claim 9, further comprising reconnecting the display unit with power when the voltage pulse concludes.

20 11. The method of Claim 9, wherein determining whether the voltage pulse is a load dump comprises measuring the time duration of the voltage pulse.

25 12. The method of Claim 9, wherein disconnecting the display unit from power if the voltage pulse is a load dump comprises disconnecting the display unit from power if the time duration of the pulse exceeds a second value.

30 13. The method of Claim 12, wherein the second value comprises approximately seventeen milliseconds.

14. The method of Claim 9, wherein receiving an  
image from a video source comprises receiving an image  
from a camera unit of an auxiliary vision system of a  
5 vehicle.

15. The method of Claim 9, wherein receiving an  
image from a video source comprises:

directing energy from a scene towards a detector;  
10 receiving energy from a portion of the scene at each  
of a plurality of detector elements;  
converting the energy received at each detector  
element into information representative of the received  
energy; and  
15 forming a visible image using the information  
representative of the received energy.

16. A protection circuitry system for protecting a vehicle system from a load dump, comprising:

a pulse detector operable to:

sense an input voltage pulse exceeding a first  
5 value; and

determine whether the voltage pulse is a load dump;

a series switch coupled to the pulse detector, the series switch operable to disconnect the system from  
10 power if the voltage pulse is a load dump; and

a load spike protector coupled to the pulse detector, the load spike protector operable to absorb the voltage pulse if the voltage pulse is not a load dump.

15 17. The circuitry system of Claim 16, wherein the series switch is further operable to reconnect the system with power when the voltage pulse concludes.

18. The circuitry system of Claim 16, wherein a  
20 pulse detector operable to determine whether the voltage pulse is a load dump comprises a pulse detector operable to measure a time duration of the voltage pulse.

19. The circuitry system of Claim 18, wherein  
25 disconnecting the system from power if the voltage pulse is a load dump comprises disconnecting the system from power if the time duration of the pulse exceeds a second value.

30 20. The circuitry system of Claim 19, wherein the second value comprises approximately seventeen milliseconds.

21. The circuitry system of Claim 16, wherein  
disconnecting the system from power if the voltage pulse  
is a load dump comprises disconnecting a display unit of  
5 an auxiliary vision system from power if the voltage  
pulse is a load dump.

22. The circuitry system of Claim 21, wherein the  
display unit is coupled to an auxiliary vision system of  
10 a vehicle.

23. The circuitry system of Claim 21, wherein the  
display unit is coupled to a global positioning satellite  
(GPS) system of a vehicle.